

Starters- Find the Slope

1. $y = 2x + 8$

2

2. $5x + 6y = 12$

$-5/6$

Chapter 4 Functions

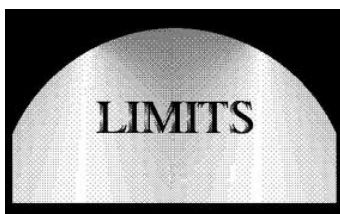
4.2 Activity Discrete and Continuous Domains

Unit Question:

How do we function within the limits we have?

Learner Profile: Communicator

Area of Interaction: Environments



I Can Statement:

I can identify discrete and continuous domains.



Think, Pair, Share

Before we share I want you to think about

the word

Discrete



What does it mean to you and how would this relate to math?

Think, Pair, Share

Before we share I want you to think about

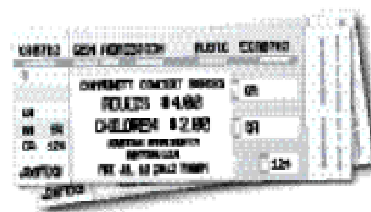
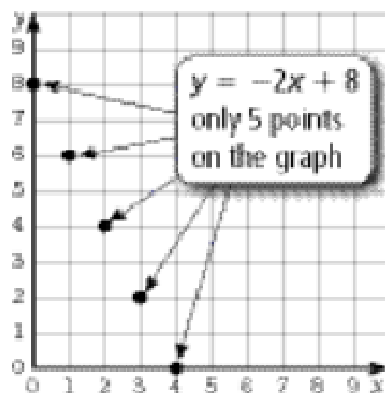
the word

Continuous



What does it mean to you and how would this relate to math?

Given



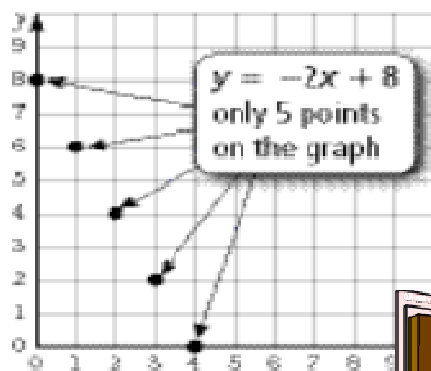
What is the domain and range of this equation?

Domain:

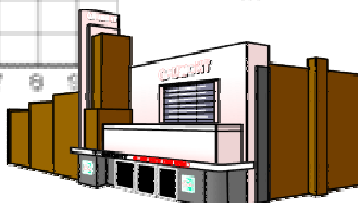
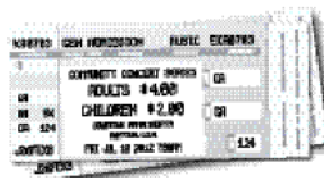
Range:

Why are the ordered pairs of the graph not connected?

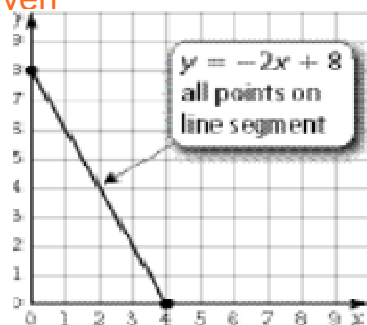
Is this graph related to discrete or continuous domain? Why?



What does the intercepts represent?



Given



What is the domain and range of this equation?

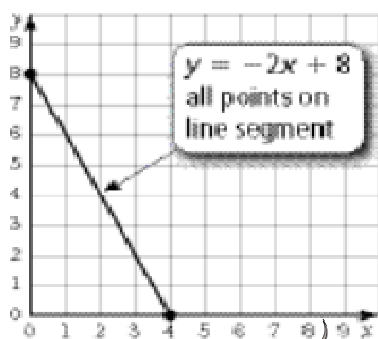
Domain:

Range:

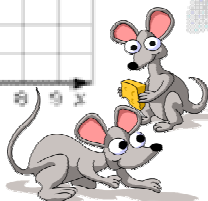


How would you describe the domain and range as inequality?

Is this graph related to discrete or continuous domain? Why?

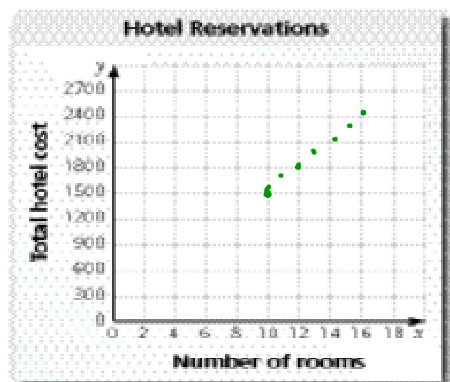


What does the intercepts represent?



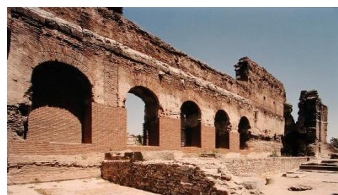
Work with a partner.

- Write a function to represent each problem.
- Graph each function.
- Describe the domain and range of each function. Is the domain discrete or continuous?



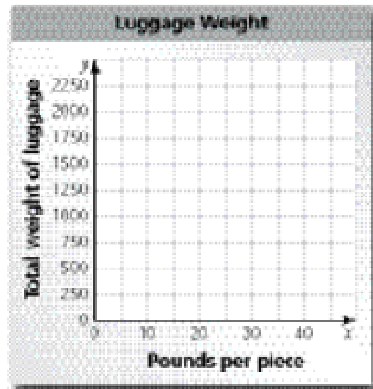
a. You are in charge of reserving hotel rooms for a youth soccer team. Each room costs \$69, plus \$6 tax, per night. You need each room for two nights. You need 10 to 16 rooms. Write a function for the total hotel cost.

$$y = 150x$$

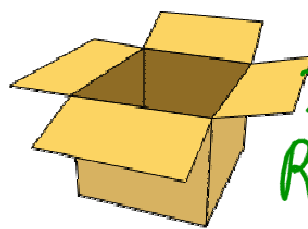


Work with a partner.

- Write a function to represent each problem.
- Graph each function.
- Describe the domain and range of each function. Is the domain discrete or continuous?



b. The airline you are using for the soccer trip needs an estimate of the total weight of the team's luggage. You determine that there will be 36 pieces of luggage and each piece will weigh from 25 to 45 pounds. Write a function for the total weight of the luggage.



$$y = 36x$$

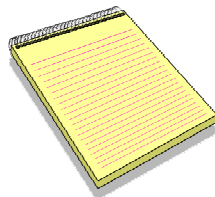
Domain $x \geq 25$

Range $y \geq$

$y \leq$

What Is Your Answer?

3. IN YOUR OWN WORDS How can you decide whether the domain of a function is discrete or continuous? Describe two real-life examples of functions: one with a discrete domain and one with a continuous domain.



Classwork- Compare with your team

Workbook Activity 4.2 p81-82

p156 - 157 1-3 all

Homework-

p158 1-10all